	Application No.	Applicant(s)
Notice of Allowability	10/804,244	OIKAWA ET AL.
	Examiner	Art Unit
	George P. Wyszomierski	1793
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to the papers filed 10/12/2007.		
2. The allowed claim(s) is/are 1,2 and 9-11.		
<ul> <li>3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>		
Attachment(s)  1. Notice of References Cited (PTO-892)	5. Notice of Informal P	atent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	Paper No./Mail Dat 7. ⊠ Examiner's Amendr	te
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's Stateme	ent of Reasons for Allowance

Application/Control Number:

10/804,244 Art Unit: 1793

- 1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 2. This application is in condition for allowance except for the presence of claim 8 directed to an invention non-elected without traverse. Accordingly:

Claim 8 has been cancelled.

- 3. The following is an examiner's statement of reasons for allowance:
- a) The prior art does not disclose or suggest a shape memory alloy comprising 23-27% AI, 39-45% Co, and 28-38% Ni (all in atomic %), and comprising a  $\beta$ -phase and 5-50% by volume  $\gamma$ -phase, at least 40% by area of crystal grain boundaries of the  $\beta$ -phase occupied by the  $\gamma$ -phase, and having a tensile strength of 400-1100 MPa and shape recovery of 18% or more.
- b) With regard to previously applied prior art, the Declarations by Professor Oikawa dated September 27, 2007 and October 9, 2007 provide evidence that the materials disclosed in the Oikawa APL article would not possess the tensile strength and/or the γ-phase area ratio required by the instant claims. Further, the examiner agrees that the JP '273 reference provides no disclosure from which one of skill in the art would be able to derive materials having a combination of composition, microstructure, and properties as required by the instant claims. To achieve the claimed materials from the JP '273 disclosure would be far beyond routine

10/804,244 Art Unit: 1793

optimization normally done in the art, but rather would involve a substantial amount of undue experimentation in an inherently unpredictable field.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. All patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GPW January 3, 2008